

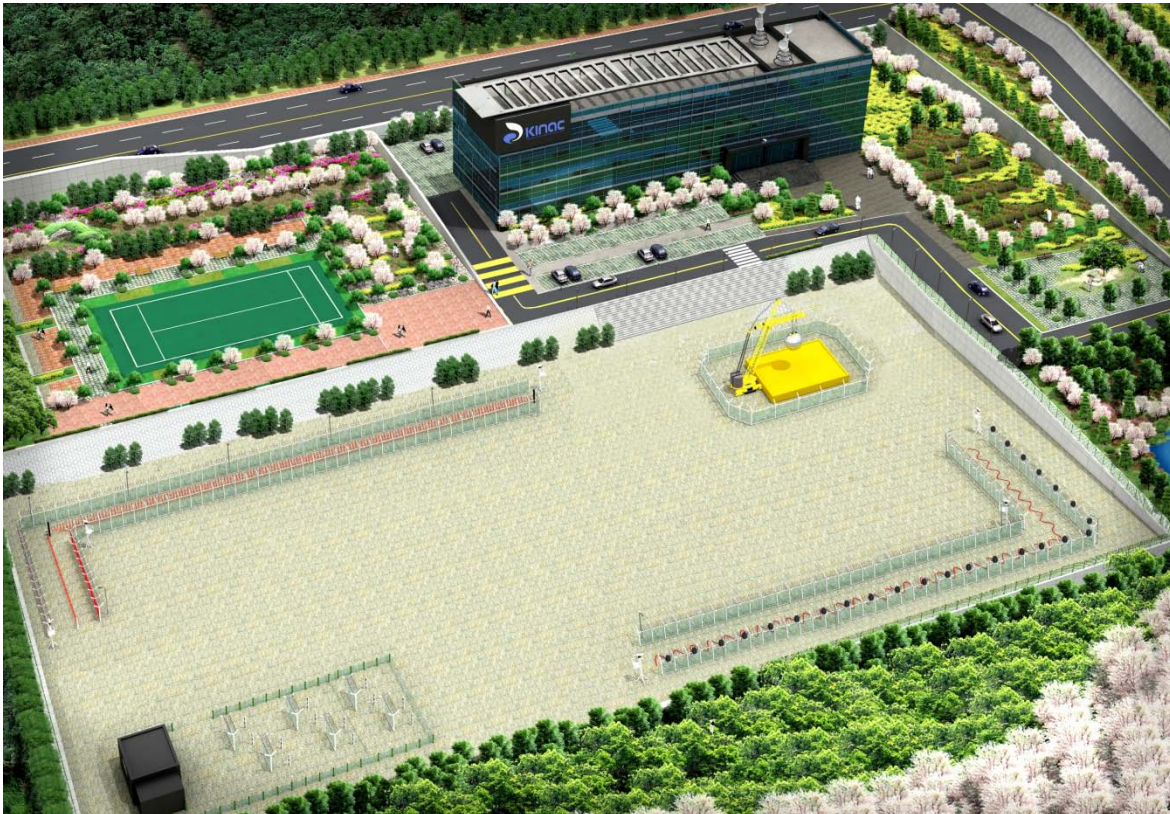
International Training Centre (Nuclear Security & Nonproliferation)

February 3, 2011

- International Hub center for education and training regarding security, safeguards and import & export control
- Platform for domestic mandatory education (Nuclear Security & Safeguards)
- R&D for physical protection system

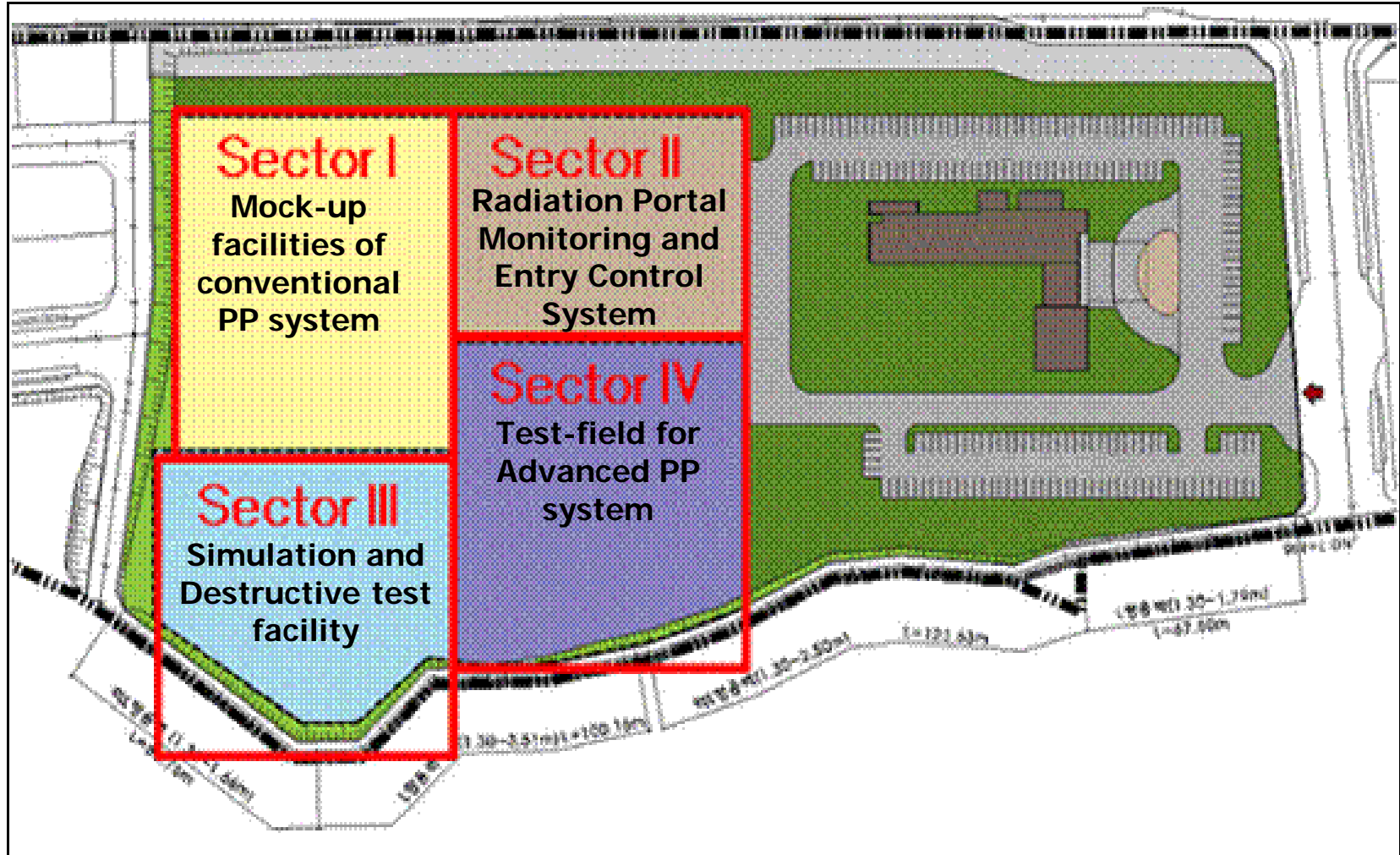
- International & Domestic Education
- Training
- Evaluation
- Technical Support
- R&D
- International Cooperation

Overall feature of the centre



- Location :
Daejeon, ROK
- Area : 39,000 m²
- Center Building :
5 stories
- Facility :
Test bed, central
alarm station and
lecture rooms

Overall feature of the centre



Sector I

- Mock-up facilities of conventional PP system
 - Fences, Active Infrared Sensor
 - Magnetic Field Sensor, etc.

Sector II

- Radiation Portal Monitoring and Entry Control System
 - Vehicle inspection system at Megaports
 - Entry and Search control system for educational purpose

Sector III

- Simulation facility for Force-on-Force exercise
- Destructive test facility
 - Cutting test on Fences, Crash test on barriers, etc.

Sector IV

- Test-field for Advanced PP system
 - Planned to be used or State of the art sensors system
 - Thermal detection camera, Sonar, Laser Fence etc.

□ Education and Training (International)

● Nuclear Security (English course)

- ▶ Expected participants : Foreigners (Asia, Arab etc.)
- ▶ Number of attendee : 30 persons(Tentative)/per course
- ▶ Lecturers : Korean, Foreign experts(IAEA, US etc)
- ▶ Program contents : Current tendency of nuclear terrorism, Design and evaluation of a physical protection system, Detection and Response to an illegal act involving nuclear and radioactive materials, etc
- ▶ Using Test bed that will be constructed
- ▶ Visit nuclear facility (Research reactor, nuclear power plant etc)

- **International Safeguards (English course)**

- ▶ Expected participants : Foreigners (Asia, Arab etc.)
- ▶ Number of attendee : 30 persons(Tentative)/per course
- ▶ Lecturers : Korean, Foreign experts(IAEA, US etc)
- ▶ Program contents : MC&A, IAEA system, national system, etc.
- ▶ Test lab will be installed in the ITC
- ▶ Visit nuclear facility (Research reactor, nuclear power plant etc)

- **Imports & Exports control (English course)**

- ▶ Expected participants : Foreigners (Asia, Arab etc.)
- ▶ Number of attendee : 30 persons(Tentative)/per course
- ▶ Lecturers : Korean, Foreign experts(IAEA, US etc)
- ▶ Program contents : Export & import control, NSG guidelines
- ▶ Collaboration with CITS

□ Domestic Mandatory course

● Nuclear Security (Mandatory course)

- ▶ Expected participants : Nuclear facility operators, site safeguards
- ▶ Number of attendee : 800 persons(Tentative)/per year
- ▶ Lecturers : Korean experts(KINAC, Military etc.)
- ▶ Program contents : Introduction of physical protection, Design basis threat, contingency plan, physical protection system, etc.

● Safeguards (Mandatory course)

- ▶ Expected participants : Researchers who deal with nuclear materials those who
- ▶ Number of attendee : 200 persons/per year
- ▶ Lecturers : Korean experts(KINAC, MEST etc.)
- ▶ Program contents : International safeguards, international regime for non-proliferation, MC&A etc.

- **Education program collaboration with universities (under construction)**
 - **Install regular course at universities**
 - ▶ **Expected participants** : students with Master's degree or Ph.D
 - ▶ **Number of attendee** : 20 persons(Tentative)/per year
 - ▶ **Lecturers** : Korean and Foreign experts(IAEA, US etc.)
 - ▶ **Program contents** :
 - Nuclear Security
 - International and National Safeguards system
 - Imports and exports system
 - ▶ **Conclusion of MOU with Seoul National University in 2010**

- **Experiments on physical protection system**
 - Performance tests on the equipment for physical protection system (sensors, barrier etc.)
 - Produce data for use in evaluating the vulnerability of nuclear facilities
 - Tests on newly developed equipments

- The ROK has established national regime of nuclear security abiding by the international standards
- The center will be constructed by 2013 and open to the world in 2014
- International cooperation is essentially needed to use this center more efficiently and effectively